

REMARKS**INTRODUCTION**

In view of the foregoing, claims 1, 8, 18, and 22 have been amended, and claims 7 and 16 have been canceled, without prejudice or disclaimer. No new matter has been submitted.

Claims 1-3, 8, 11-13, 15 and 17-22 are pending and under consideration.

REJECTIONS

Claims 1-3, 13 and 18-22 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Kim et al., U.S. Patent No. 6,041,027; claims 8 and 15 stand rejected under 35 U.S.C. § 103(a) as being obvious over Kim et al., in view of Ichimura et al., U.S. Publication No. 20050163033; claims 11 and 12 stand rejected under 35 U.S.C. § 103(a) as being obvious over Kim et al., in view of Noguchi et al., U.S. Patent No. 5,309,423; and claim 17 stands rejected under 35 U.S.C. § 103(a) based upon a combination of Kim et al., Ichimura et al., and Arai et al., U.S. Patent No. 6,870,805. These rejections are respectfully traversed.

The independent claims have been amended to include the claimed collimating lenses and a claimed relay lens, for example as shown in claim 1, which now further recites:

"first and second collimating lenses which are respectively disposed on an optical path between the first light module and the beam splitter and an optical path between the second light module and the beam splitter;

a relay lens disposed on at least one of an optical path between the first light module and the first collimating lens and an optical path between the second light module and the second collimating lens and which changes a divergent angle of incident light and outputs light with a divergent angle."

Similar featured claims 7 and 16 have been canceled. Here, claim 7 sets forth the claimed collimating lenses, and claim 16 sets forth a relay lens. Further, claims 7 and 16 previously stood rejected under 35 U.S.C. § 103(a) based upon a combination of Kim et al. and Ichimura et al.. As corresponding features have been added to the independent claims, it is respectfully submitted that the previous 35 U.S.C. § 102 rejection is now moot.

Thus, it is respectfully submitted that none of Kim et al., Ichimura et al., Noguchi et al., Arai et al., together or alone, disclose or suggest the above claimed combination of features, including the claimed relay lens being placed before the claimed collimating lens and to change the divergence of the input light to generate a different diverging light upon exit from the relay lens.

Again, to disclose the claimed collimating lenses and a relay lens, as now set forth in the independent claims, the Office Action has relied upon Ichimura et al.

In particular, the Office Action pointed to FIG. 14 of Ichimura et al., and elements 17 and 21, as disclosing collimating lenses. Further, the Office Action again pointed to FIG. 14 of Ichimura et al., and element 17, as disclosing a relay lens.

However, this portion of Ichimura et al. merely illustrates two collimating lenses, elements 17 and 21, and fails to disclose or suggest that a relay lens can be placed between the light source and the collimating lens. The Office Action proffered collimating lenses 17 and 21 do not change a diverging light ray into another diverging light ray. Rather, by definition, these collimating lenses appear to remove any divergence in the light ray.

As indicated in the present application, the use of this relay lens permits a more variable placement of either of the light sources with reference to the collimating lens. Similarly, the relay lens can be used to control the light spot size, for example. None of Kim et al., Ichimura et al., Noguchi et al., Arai et al. disclose or suggest such a combination of features, as a whole.

Still further, in rejecting claim 7, which set forth the collimating lenses, the Office Action indicated that it the motivation for this modification of Kim et al. was "to diverge the beam to the prism."

However, this motivation is incorrect. One of ordinary skill in the art would not add a collimating lens, which by definition removes divergences in an input light, "to diverge the beam to the prism."

If one skilled in the art were to desire to "diverge the beam to the prism" a collimating lens would perform the opposite operation, and thus is incorrect.

Similarly, in rejecting claim 16, which set forth a relay lens for changing divergence of input light, the Office Action indicated that the addition of a relay lens to Kim et al. was "to align with the incident light beam."

However, this proffered motivation does not appear to be relevant to Kim et al., i.e., there is no relationship with the proposed relay lens and any of the other elements of Kim et al. for aligning "with the incident light beam," i.e., it is unclear what divergence is being changed and for which alignment this change is made.

In addition, Ichimura et al. only sets forth collimating lenses, and it is improper to now define the collimating lenses of Kim et al. as a different element, i.e., the relay lens, which by definition must do something different from a collimating lens.

Regardless, none of the relied upon references discloses or suggest both the claimed collimating lenses and the claimed relay lens.

Withdrawal of this rejection is respectfully requested.

CONCLUSION

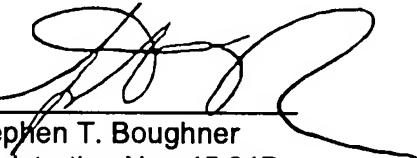
There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: August 15, 2007
By: 
Stephen T. Boughner
Registration No. 45,317

1201 New York Avenue, NW, 7th Floor
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501